

Great Salt Lake Advisory Council

9th Annual Report to the Utah State Legislature
Natural Resources Appropriations Subcommittee
February 2019



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“The Great Salt Lake Advisory Council is playing a vital role in helping to balance the many important uses of the Great Salt Lake. Now is the time to ensure this valuable natural treasure is protected for future generations.”

— Governor Gary Herbert



Great Salt Lake Advisory Council

BACKGROUND

The Great Salt Lake Advisory Council (“Council”) was established by House Bill 343 in the 2010 session of the Utah State Legislature. Council members were appointed by Governor Herbert, with consent of the Utah Senate, in June 2010. Governor Herbert kicked off the initial Council meeting on June 30, 2010.



Great Salt Lake water levels are in a long-term decline, threatening lake industries, aquaculture, recreation, conservation and other uses. The Council compiled and prioritized strategies to address low lake levels and to secure water for GSL. ©Don Leonard

Duties of the Great Salt Lake Advisory Council

Legislation creating the Great Salt Lake Advisory Council identifies five specific “duties” of the Council:

- 1) ADVISE** the governor, the Department of Natural Resources (“DNR”), and the Department of Environmental Quality (“DEQ”) *“on the sustainable use, protection, and development of the Great Salt Lake” (“GSL”) “in terms of balancing: (i) sustainable use; (ii) environmental health; and (iii) reasonable access for existing and future development.”*
- 2) ASSIST** the Division of Forestry, Fire and State Lands (“FFSL”) in its statutory responsibilities for the Great Salt Lake (i.e. to prepare and implement a comprehensive management plan, initiate and publish studies of the lake, coordinate activities of DNR divisions with respect to the lake).
- 3) RECOMMEND** appointments to the GSL technical team and utilize technical support from that team.
- 4) ASSIST** DNR and DEQ and their boards in their responsibilities for the Great Salt Lake.
- 5) REPORT** *“annually”* to the Natural Resources Appropriations Subcommittee *“on the council’s activities.”*

2018 Tasks and Activities of the Great Salt Lake Advisory Council

During 2018, the Great Salt Lake Advisory Council addressed all five of its primary work plan tasks and objectives, as follows:

- 1) ADVISE** — The Council advised the Executive branch, including the Governor’s Office, Agency Directors and department and agency managers on issues that impact GSL sustainable use, protection and development, including: policies for water administration, priorities for research, proposal for project reclassification, plans for water supply, and others.
- 2) ASSIST** — The Council met frequently with officials of the Utah Division of Forestry, Fire and State Lands to assist in and provide support for the Division’s statutory responsibilities and priorities, and to assist in initiating and publishing studies of the lake – such as the pending report on consequences of drying lakes worldwide and the pending assessment of possible consequences of a drying GSL.
- 3) RECOMMEND** — The Council provided feedback on the Division of Forestry, Fire and State Lands’ initiative to reorganize its Great Salt Lake Technical Team and utilized technical support from that team on topics, including: lakebed dust, causeway breach, Lidar data, research grants, phragmites, microbialites and salinity.
- 4) ASSIST** — The Council worked with both the Utah Department of Natural Resources and the Utah Department of Environmental Quality on Great Salt Lake issues ranging from water supply to water elevation, from non-native invasive plants to research priorities, from water management to water quality, and on numerous other issues.
- 5) REPORT** — The Council prepared and provided its 8th Annual Report to the Utah State Legislature Natural Resources, Agriculture, and Environmental Quality Appropriations Subcommittee.

The Council further fulfilled its statutory responsibilities to advise, assist, recommend, and report by holding six (6) formal meetings in 2018, with briefings, updates, reports, discussions, and counsel on current GSL topics.

Council Priority Strategies: Water for Great Salt Lake

Previously, the Council commissioned a report with seventy-two (72) potential strategies to maintain and/or increase the surface elevation (water level) of GSL. In early 2018 the Council prioritized the strategies for possible implementation. Top priorities include: allow irrigators or other water users to send water downstream without risk of losing rights; authorize split-season leases; ensure that water conserved upstream makes it to GSL; meter all secondary water; support the Integrated Water Resource Model; create and empower basin councils; increase efficiency of water systems; incorporate best management practices for water conservation; expand authority to acquire water for instream flows; and others.

Council Concerns: Landfill Reclassification

In response to possible reclassification of the Promontory Landfill from Class I to Class V status, Council members were briefed on the process, then identified questions and concerns for state agencies. Council member questions and concerns include: adequacy of measures to mitigate impacts from fugitive dust, debris, and hazardous materials on-site and from transportation to the site; sufficiency of studies to determine the scope and migration of leachate; plans to collect leachate from waste and ensure it does not contaminate groundwater, endanger wildlife, or enter GSL; potential for containment failure; design adequacy to handle runoff; sufficiency of plans to secure protection of avian resources and their critical food chain; risk of anticipated large volumes of hazardous materials (toxins) in close proximity to GSL.

Council Technical Support: GSLTT

Statutory duties of the Council include utilizing technical support and information from the Great Salt Lake Technical Team ("GSLTT"). During 2018 the Council received technical reports from GSLTT on multiple research topics, including: GSL lake bed dust project, GSL deep brine layer project and GSL mercury methylation projects (5/16); GSL Lidar data project and GSLTT Research Grants (7/11); GSL microbialite study and GSL Phragmites treatment and revegetation study (9/12); and GSLTT reorganization report (11/4). The Council will continue to receive technical information and support from GSLTT.

Council Study: Drying Lakes Worldwide

Around the world many terminal lake systems are in peril, with devastating impacts to human health, local economies and the environment. GSL and its ecosystem may face a similar fate. Fortunately, Utahns still have time to avert the most serious damage. In 2018 the Council decided to help inform and foster advance planning and actions to protect GSL and its wetlands by commissioning a report on consequences of drying lake systems around the world. This important report will be completed in early 2019.



The Great Salt Lake supports mineral industries which extract salts and metals from heavy brine in evaporation ponds. The lake is also a valuable resource for aquaculture, conservation, recreation, water treatment, and for other industries. Overall, the Great Salt Lake contributes \$1.3 billion annually to Utah's economy. © Charles Uibel

Council Assessment: Costs of Declining Water

Great Salt Lake and its wetlands are at risk from a lack of water. A declining lake system poses serious risks for people and health, wildlife and the environment, as well as Utah's economic well-being. Addressing water supply to the lake in the face of a growing population poses a serious challenge. Policy and decision makers would benefit from an understanding of what is at stake if the lake and its wetlands are lost or significantly impaired. In 2018 the Council commissioned a study to examine the social, environmental and economic impacts of inadequate GSL water levels. The point of the assessment is to provide a more comprehensive accounting of what the potential loss of a healthy GSL and its wetlands (due to declining water levels) could mean to our economy and quality of life. This important assessment of potential costs of declining water levels of GSL will be completed in July 2019.

Council Policy: Water Administration

There is an urgent need to implement a focused policy effort to address the decline of lake level of Great Salt Lake. The Council believes that by advancing policy changes now, Utah will be best-positioned to avoid the kind of degradation and economic harm experienced by other states. However, there is a narrowing window of opportunity. Consequently, in late 2018 the Council adopted a recommendation that the Governor and State agencies should implement an overall policy that supports effective allocation and administration of water flow to Great Salt Lake, and use of water within its watershed to maintain or increase lake levels, while appropriately balancing economic, social, and environmental needs. Administrative policy direction and action is required to provide and maintain water flow to Great Salt Lake.

Great Salt Lake Advisory Council Summary of 2018 Council Meetings



Great Salt Lake adds \$1.3 billion annually to Utah's economy, with hunting and other recreational uses (bird watching, wildlife viewing, sailing, camping, bike riding, photography) being important components. ©Scott Baxter

January 10, 2018 — Davis County Administration Building

- Report on GSL Salinity Advisory Committee by Jacobs Engineering Group, Inc.
- Update on Integrated Water Resource Management Model by Utah Division of Forestry, Fire and State Lands
- Report on Promontory Point Landfill by Utah Division of Waste Management and Radiation Control
- Review and Prioritization of Strategies for Water for Great Salt Lake

March 14, 2018 — Davis County Administration Building

- Report on Great Salt Lake Technical Team ("GSLTT") by Utah Division of Forestry, Fire and State Lands
- Summary of GSL Issues in the 2018 Utah State Legislature and Review of H.B. 274 Providing Funding for Council
- Evaluation of Strategies in Council Report on Water for Great Salt Lake by Attorney Steve Clyde

May 16, 2018 — Davis County Administration Building

- Research Reports from GSLTT on Dust Quantification Study Summarized by Utah Division of Forestry, Fire and State Lands and on Monitoring Effects of Causeway Breach Summarized by Utah Division of Water Quality
- Presentation on Application to Store and Appropriate Bear Lake/River Water by Utah Division of Water Resources

July 11, 2018 — Davis County Administration Building

- GSLTT Research Report on Lidar Data Summarized by Utah Division of Water Quality
- Review of GSLTT Research Grants by Forestry, Fire and State Lands

- Report on Developing a New State Water Plan by Utah Division of Water Resources
- Proposal for Report on Consequences of Drying Lake Systems Around the World
- Proposal for Assessment of Potential Costs of Declining Water Levels of Great Salt Lake

September 12, 2018 — Davis County Administration Building

- Research Report on Phragmites Re-vegetation Summarized by Utah Division of Forestry, Fire and State Lands
- GSLTT Report on Microbialite Response to Salinity in GSL Summarized by Utah Division of Water Quality
- Report on Water Reuse Feasibility Study by Weber Basin Water Conservancy District
- Proposal for State Policy on Water for GSL and Letter to the Governor

November 14, 2018 — Davis County Administration Building

- Council Membership Report by Council Subcommittee
- Reorganization of GSLTT by Utah Division of Forestry, Fire and State Lands
- Proposal on Great Salt Lake Situation Assessment from University of Utah
- Status Report on Great Salt Lake Water Quality Strategy by Utah Division of Water Quality

Great Salt Lake Advisory Council

Chair

Don Leonard

Vice-Chair

Dave Livermore

Box Elder County

Commissioner
Jeffrey Scott

Davis County

Commissioner
Randy Elliott

Salt Lake County

Carlton Christensen

Tooele County

Dan Tuttle

Weber County

Commissioner
Kerry Gibson

Municipal Government

Tom Ward

Conservation Interests

Dave Livermore

Migratory Bird

Protection Areas
Jeff Richards

Extractive Industry

Todd Bingham

Aquaculture

Don Leonard

Publicly Owned

Treatment Works
Leland Myers

For information contact: Jake Vanderlann, jvander@utah.gov, 801-536-4350 or Laura Vernon, lauravernon@utah.gov, 801-538-5530